

## PROJECT PROFILE:

# TOWER FOUNDATION

Due to the lack of storage, a paper tissue manufacturer saw the need to add a third high density storage tower and pump house to store and distribute wet paper pulp. The size of the tower and the weight of the wet paper pulp required a substantial foundation located alongside the second storage tower and the pump house.

### PROBLEM

The installation of the tower foundation required that Raffin excavate 9' below and 4' away from the existing pump house foundations. Therefore, a system had to be devised to ensure that the existing foundation would not be undermined.



### SOLUTION

During the pre-construction planning phase, we recommended, based on soils analysis, raising the bottom of the new foundations 3', thus saving the owner \$30,000. In addition, we designed and installed a compression ring soldier pile system around the perimeter of the tower foundation which would support the existing pump house. Within 4 weeks of the award of contract Raffin designed and installed the soil retention system, erected the rebar, placed the concrete and stripped the foundation so that construction of the tower could begin. The 280 cubic yards of concrete required for the foundation was poured in one day.